

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	139-025U
First Inventor	Dong-Ho Oh
Title	METHOD AND APPARATUS REDUCING OFF-TRACK HEAD MOTION DUE TO DISK VIBRATION IN A HARD DISK DRIVE USING CONFIGURATION OF THE DISK DRIVE SERVO-CONTROLLER
Express Mail Label No.	EV330478115US

PTO

U.S. PATENT AND TRADEMARK OFFICE

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. Applicant claims small entity status.
See 37 CFR 1.27.
3. Specification [Total Pages 24]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. Drawing(s) (35 U.S.C. 113) [Total Sheets 21]
[Total Sheets 2]
5. Oath or Declaration
- a. Newly executed (original or copy)
- b. Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)

i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. Application Data Sheet. See 37 CFR 1.76

ADDRESS TO:Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. paper
 - c. Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. Assignment Papers (cover sheet & document(s))
10. 37 CFR 3.73(b) Statement
(when there is an assignee) Power of Attorney
11. English Translation Document (if applicable)
12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations
13. Preliminary Amendment
14. Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. Other:

18 If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation Divisional Continuation-in-part (CIP)

of prior application No.: _____

Prior application information: Examiner _____

Group Art Unit: _____

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

Customer Number or Bar Code Label 23429
(Insert Customer No. or Attach bar code label here) or Correspondence address below

Name	Gregory Smith & Associates				
Address	3900 Newpark Mall Road, Suite 317				
City	Newark	State	CA	Zip Code	94560
Country	US	Telephone	(510) 742-7417		Fax (510) 742-7419

Name (Print/type)	GREGORY SCOTT SMITH	Registration No. (Attorney/Agent)	38309
Signature		Date	July 10, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

17707 U.S. PTO
07/10/03

PTO/SB/17 (01-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant Claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 786.00)

Complete if Known

Application Number	
Filing Date	7/10/03
First Named Inventor	Dong-Ho Oh
Examiner Name	
Art Unit	
Attorney Docket No.	139-025U

METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)																																																																																																																																																									
<input type="checkbox"/> Check <input checked="" type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None <input type="checkbox"/> Deposit Account Deposit Account Number Deposit Account Name Gregory Smith & Associates				3. ADDITIONAL FEES <table border="1"> <thead> <tr> <th>Large Entity</th> <th>Small Entity</th> <th colspan="2">Fee Description</th> <th>Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> <th></th> </tr> </thead> <tbody> <tr> <td>1051</td> <td>130</td> <td>2051</td> <td>65</td> <td>Surcharge - late filing fee or oath</td> </tr> <tr> <td>1052</td> <td>50</td> <td>2052</td> <td>25</td> <td>Surcharge - late provisional filing fee or cover sheet</td> </tr> <tr> <td>1053</td> <td>130</td> <td>1053</td> <td>130</td> <td>Non-English specification</td> </tr> <tr> <td>1812</td> <td>2,520</td> <td>1812</td> <td>2,520</td> <td>For filing a request for ex parte reexamination</td> </tr> <tr> <td>1804</td> <td>920*</td> <td>1804</td> <td>920*</td> <td>Requesting publication of SIR prior to Examiner action</td> </tr> <tr> <td>1805</td> <td>1,840*</td> <td>1805</td> <td>1,840*</td> <td>Requesting publication of SIR after Examiner action</td> </tr> <tr> <td>1251</td> <td>110</td> <td>2251</td> <td>55</td> <td>Extension for reply within first month</td> </tr> <tr> <td>1252</td> <td>410</td> <td>2252</td> <td>205</td> <td>Extension for reply within second month</td> </tr> <tr> <td>1253</td> <td>930</td> <td>2253</td> <td>465</td> <td>Extension for reply within third month</td> </tr> <tr> <td>1254</td> <td>1,450</td> <td>2254</td> <td>725</td> <td>Extension for reply within fourth month</td> </tr> <tr> <td>1255</td> <td>1,970</td> <td>2255</td> <td>985</td> <td>Extension for reply within fifth month</td> </tr> <tr> <td>1401</td> <td>320</td> <td>2401</td> <td>160</td> <td>Notice of Appeal</td> </tr> <tr> <td>1402</td> <td>320</td> <td>2402</td> <td>160</td> <td>Filing a brief in support of an appeal</td> </tr> <tr> <td>1403</td> <td>280</td> <td>2403</td> <td>140</td> <td>Request for oral hearing</td> </tr> <tr> <td>1451</td> <td>1,510</td> <td>1451</td> <td>1,510</td> <td>Petition to institute a public use proceeding</td> </tr> <tr> <td>1452</td> <td>110</td> <td>2452</td> <td>55</td> <td>Petition to revive - unavoidable</td> </tr> <tr> <td>1453</td> <td>1,300</td> <td>2453</td> <td>650</td> <td>Petition to revive - unintentional</td> </tr> <tr> <td>1501</td> <td>1,300</td> <td>2501</td> <td>650</td> <td>Utility issue fee (or reissue)</td> </tr> <tr> <td>1502</td> <td>470</td> <td>2502</td> <td>235</td> <td>Design issue fee</td> </tr> <tr> <td>1503</td> <td>630</td> <td>2503</td> <td>315</td> <td>Plant issue fee</td> </tr> <tr> <td>1460</td> <td>130</td> <td>1460</td> <td>130</td> <td>Petitions to the Commissioner</td> </tr> <tr> <td>1807</td> <td>50</td> <td>1807</td> <td>50</td> <td>Processing fee under 37 CFR 1.17(q)</td> </tr> <tr> <td>1806</td> <td>180</td> <td>1806</td> <td>180</td> <td>Submission of Information Disclosure Stmt</td> </tr> <tr> <td>8021</td> <td>40</td> <td>8021</td> <td>40</td> <td>Recording each patent assignment per property (times number of properties)</td> </tr> <tr> <td>1809</td> <td>750</td> <td>2809</td> <td>375</td> <td>Filing a submission after final rejection (37 CFR § 1.129(a))</td> </tr> <tr> <td>1810</td> <td>750</td> <td>2810</td> <td>375</td> <td>For each additional invention to be examined (37 CFR § 1.129(b))</td> </tr> <tr> <td>1801</td> <td>750</td> <td>2801</td> <td>375</td> <td>Request for Continued Examination (RCE)</td> </tr> <tr> <td>1802</td> <td>900</td> <td>1802</td> <td>900</td> <td>Request for expedited examination of a design application</td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Description		Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)		1051	130	2051	65	Surcharge - late filing fee or oath	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	1053	130	1053	130	Non-English specification	1812	2,520	1812	2,520	For filing a request for ex parte reexamination	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	1251	110	2251	55	Extension for reply within first month	1252	410	2252	205	Extension for reply within second month	1253	930	2253	465	Extension for reply within third month	1254	1,450	2254	725	Extension for reply within fourth month	1255	1,970	2255	985	Extension for reply within fifth month	1401	320	2401	160	Notice of Appeal	1402	320	2402	160	Filing a brief in support of an appeal	1403	280	2403	140	Request for oral hearing	1451	1,510	1451	1,510	Petition to institute a public use proceeding	1452	110	2452	55	Petition to revive - unavoidable	1453	1,300	2453	650	Petition to revive - unintentional	1501	1,300	2501	650	Utility issue fee (or reissue)	1502	470	2502	235	Design issue fee	1503	630	2503	315	Plant issue fee	1460	130	1460	130	Petitions to the Commissioner	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	1806	180	1806	180	Submission of Information Disclosure Stmt	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))	1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	1801	750	2801	375	Request for Continued Examination (RCE)	1802	900	1802	900	Request for expedited examination of a design application
Large Entity	Small Entity	Fee Description		Fee Paid																																																																																																																																																									
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																										
1051	130	2051	65	Surcharge - late filing fee or oath																																																																																																																																																									
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																									
1053	130	1053	130	Non-English specification																																																																																																																																																									
1812	2,520	1812	2,520	For filing a request for ex parte reexamination																																																																																																																																																									
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																									
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																									
1251	110	2251	55	Extension for reply within first month																																																																																																																																																									
1252	410	2252	205	Extension for reply within second month																																																																																																																																																									
1253	930	2253	465	Extension for reply within third month																																																																																																																																																									
1254	1,450	2254	725	Extension for reply within fourth month																																																																																																																																																									
1255	1,970	2255	985	Extension for reply within fifth month																																																																																																																																																									
1401	320	2401	160	Notice of Appeal																																																																																																																																																									
1402	320	2402	160	Filing a brief in support of an appeal																																																																																																																																																									
1403	280	2403	140	Request for oral hearing																																																																																																																																																									
1451	1,510	1451	1,510	Petition to institute a public use proceeding																																																																																																																																																									
1452	110	2452	55	Petition to revive - unavoidable																																																																																																																																																									
1453	1,300	2453	650	Petition to revive - unintentional																																																																																																																																																									
1501	1,300	2501	650	Utility issue fee (or reissue)																																																																																																																																																									
1502	470	2502	235	Design issue fee																																																																																																																																																									
1503	630	2503	315	Plant issue fee																																																																																																																																																									
1460	130	1460	130	Petitions to the Commissioner																																																																																																																																																									
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)																																																																																																																																																									
1806	180	1806	180	Submission of Information Disclosure Stmt																																																																																																																																																									
8021	40	8021	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																									
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																																																									
1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))																																																																																																																																																									
1801	750	2801	375	Request for Continued Examination (RCE)																																																																																																																																																									
1802	900	1802	900	Request for expedited examination of a design application																																																																																																																																																									
The Commissioner is authorized to: (check all that apply) <input type="checkbox"/> Charge fee(s) indicated below <input checked="" type="checkbox"/> Credit any overpayments <input type="checkbox"/> Charge any additional fee(s) during the pendency of this application <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.				Fee Description Fee Paid																																																																																																																																																									
FEE CALCULATION																																																																																																																																																													
1. BASIC FILING FEE																																																																																																																																																													
<table border="1"> <thead> <tr> <th>Large Entity</th> <th>Small Entity</th> <th colspan="2">Fee Description</th> <th>Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> <th></th> </tr> </thead> <tbody> <tr> <td>1001</td> <td>750</td> <td>2001</td> <td>375</td> <td>Utility filing fee</td> </tr> <tr> <td>1002</td> <td>330</td> <td>2002</td> <td>165</td> <td>Design filing fee</td> </tr> <tr> <td>1003</td> <td>520</td> <td>2003</td> <td>260</td> <td>Plant filing fee</td> </tr> <tr> <td>1004</td> <td>750</td> <td>2004</td> <td>375</td> <td>Reissue filing fee</td> </tr> <tr> <td>1005</td> <td>160</td> <td>2005</td> <td>80</td> <td>Provisional filing fee</td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Description		Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)		1001	750	2001	375	Utility filing fee	1002	330	2002	165	Design filing fee	1003	520	2003	260	Plant filing fee	1004	750	2004	375	Reissue filing fee	1005	160	2005	80	Provisional filing fee	SUBTOTAL (1) (\$ 375.00)																																																																																																																						
Large Entity	Small Entity	Fee Description		Fee Paid																																																																																																																																																									
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																										
1001	750	2001	375	Utility filing fee																																																																																																																																																									
1002	330	2002	165	Design filing fee																																																																																																																																																									
1003	520	2003	260	Plant filing fee																																																																																																																																																									
1004	750	2004	375	Reissue filing fee																																																																																																																																																									
1005	160	2005	80	Provisional filing fee																																																																																																																																																									
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE																																																																																																																																																													
<table border="1"> <thead> <tr> <th>Total Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>22</td> <td>-20** = 2</td> <td>x 18.00</td> <td>= 36.00</td> </tr> <tr> <td>2</td> <td>- 3** = 0</td> <td>x 84</td> <td>= 0</td> </tr> </tbody> </table>				Total Claims	Extra Claims	Fee from below	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	22	-20** = 2	x 18.00	= 36.00	2	- 3** = 0	x 84	= 0																																																																																																																																										
Total Claims	Extra Claims	Fee from below	Fee Paid																																																																																																																																																										
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																										
22	-20** = 2	x 18.00	= 36.00																																																																																																																																																										
2	- 3** = 0	x 84	= 0																																																																																																																																																										
Multiple Dependent <table border="1"> <thead> <tr> <th>Large Entity</th> <th>Small Entity</th> <th colspan="2">Fee Description</th> <th>Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> <th></th> </tr> </thead> <tbody> <tr> <td>1202</td> <td>18</td> <td>2202</td> <td>9</td> <td>Claims in excess of 20</td> </tr> <tr> <td>1201</td> <td>84</td> <td>2201</td> <td>42</td> <td>Independent claims in excess of 3</td> </tr> <tr> <td>1203</td> <td>280</td> <td>2203</td> <td>140</td> <td>Multiple dependent claim, if not paid</td> </tr> <tr> <td>1204</td> <td>84</td> <td>2204</td> <td>42</td> <td>**Reissue independent claims over original patent</td> </tr> <tr> <td>1205</td> <td>18</td> <td>2205</td> <td>9</td> <td>**Reissue claims in excess of 20 and over original patent</td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Description		Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)		1202	18	2202	9	Claims in excess of 20	1201	84	2201	42	Independent claims in excess of 3	1203	280	2203	140	Multiple dependent claim, if not paid	1204	84	2204	42	**Reissue independent claims over original patent	1205	18	2205	9	**Reissue claims in excess of 20 and over original patent	SUBTOTAL (2) (\$ 36.00)																																																																																																																						
Large Entity	Small Entity	Fee Description		Fee Paid																																																																																																																																																									
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																										
1202	18	2202	9	Claims in excess of 20																																																																																																																																																									
1201	84	2201	42	Independent claims in excess of 3																																																																																																																																																									
1203	280	2203	140	Multiple dependent claim, if not paid																																																																																																																																																									
1204	84	2204	42	**Reissue independent claims over original patent																																																																																																																																																									
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent																																																																																																																																																									
** or number previously paid, if greater; For Reissues, see above				Other fee (specify) _____																																																																																																																																																									
*Reduced by Basic Filing Fee Paid				SUBTOTAL (3) (\$)																																																																																																																																																									

SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	GREGORY SCOTT SMITH	Registration No. (Attorney/Agent)	38309	Telephone	(510) 742-7417
Signature				Date	July 10, 2003

WARNING: Information in this form may become public. Credit card information should not be included in this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 37 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.